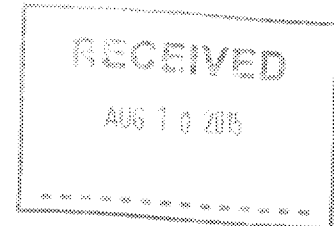




IDAHO TRANSPORTATION DEPARTMENT
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(208) 799-5090
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August 3, 2015



US Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

RE: US-95 Thorncreek Road to Moscow L-28 DEIS comments

Dear Sir or Madam:

The Idaho Transportation Department (ITD) received your letter dated March 25, 2013 regarding the referenced project. We acknowledge your concerns regarding the E-2 Alternative and your detailed comments. We are providing the following as a follow-up to your concerns. The headers correspond to the bolded topic headers in your comment letter.

Preferred Alternative-Need for Context Sensitive Solution

As you noted in your letter, ITD and The Federal Highways Administration (FHWA) have taken steps to involve agencies, gather public comment and to conduct further studies. Based on the Revised Safety Analysis (ITD 2013) and in consideration of new information and the findings of the various technical studies and public input, ITD and FHWA maintain that the E-2 Alternative is FHWA's and ITD's Preferred Alternative. The E-2 Alternative is preferred and the alignment was not altered because it is designed and located to provide the greatest safety benefit which best meets the project purpose and need. However, additional mitigation measures have been added to the FEIS to address the E-2 Alternatives' impacts to natural resources. See FEIS Section 2.6 Preferred Alternative and Chapter 9, Environmental Commitments. The E-2 Alternative is predicted to have 46 fewer total crashes and 9 fewer fatal and injury related crashes in the 19-year design period compared to the C-3 Alternative. It is predicted to have 32 fewer total crashes and 16 fewer fatal and injury related crashes in the 19 year design period compared to the W-4 Alternative and 31 fewer total crashes and 15.5 fatal and injury crashes than the Modified W-4 Alternative. The differences in the human impacts are believed by ITD and FHWA to be a considerable difference and that the other impacts, with mitigation would not outweigh the benefits.

Context sensitive solutions that have been incorporated into the Preferred Alternative are described in the FEIS Chapter 9, Environmental Commitments. A few examples are listed below:

- Should the E-2 Alternative be selected, ITD will evaluate engineering solutions to reduce the impacts to the Palustrine scrub-shrub wetlands (Wetlands 13 and 32). This could involve steepening slopes to reduce wetland fill while still designing to meet safety standards. This change will be evaluated and designed during the preliminary design process when detailed geotechnical and survey detail is available.
- ITD will construct an undercrossing for Eid Road that will be designed to accommodate both vehicle traffic and wildlife, including ungulates, to cross under the highway.

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- The crossing would have sloped sides with a natural surface.
- The animals would use the sloped side as well as the right of way adjacent to the highway. Fencing will be installed to direct wildlife to the crossing. All tributary crossings, including the crossings at Wetlands 13 and 32, which are scrub-shrub wetlands, will be designed to accommodate small terrestrial wildlife. Details of the crossing structures and fencing will be determined during preliminary and final design when detailed topographic and geotechnical information is available.
- US-95 will be an Expressway Access Control facility and no new non-agricultural accesses will be permitted on US-95 without ITD consent, which would minimize future private and commercial development. This will reduce the potential future impacts to resources including rare, sensitive and ecologically valuable habitats and ecosystems, scenic value, natural functions. This access control will also minimize future farmland impacts, and future impacts to wildlife habitat due to development. See the FEIS Section 2.4.2 and 4.10 for additional information regarding proposed future access. See Chapter 6.1 regarding indirect effects due to induced growth.
- ITD will work with farmers to construct farmable slopes. This will both minimize the amount of farmable land lost and reduce weed establishment and spread to sensitive areas.
- ITD's Vegetation Management Plan will be implemented as summarized in FEIS Section 4.8 and in Chapter 9, Environmental Commitments.

The Clean Water Act (CWA) Section 404(b)(1) analysis will be completed during the Section 404 permit process should an action alternative be selected. During the preliminary and final design process and coordination with the USACE, there will be ongoing efforts to further avoid, minimize, and mitigate potential adverse impacts to wetlands, waters of US, Palouse prairie and other natural as well as human resources through the use of engineering solutions. Section 4.6 under the heading Executive Order 11990 discusses avoidance, minimization and mitigation for wetland impacts.

Aquatic Resources Effects

Additional information demonstrating the alternatives' effects on 303(d) listed streams and compliance with TMDLs has been added to the FEIS Section 4.6 Wetlands and Tributaries and to FEIS Chapter 6, Indirect and Cumulative Effects.

ITD recognizes that the headwater streams that would be impacted by the E-2 Alternative provide a higher level of function compared to those further downstream. This is reflected through the higher wetland rating which considers three major categories of functions and values including water quality, hydrology and habitat. This is also stated in the DEIS Section 4.6.1. Compensatory Mitigation for the Loss of Aquatic Habitat [33 CFR Parts 325 and 332 and 40 CFR 230] and Executive Order 11990, Protection of Wetlands require that lost functions and values be replaced.

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Additional detail regarding mitigation including the avoidance, minimization and compensatory mitigation in order to replace the impacted wetland functions and values are described in the FEIS Section 4.6 and Chapter 9, Environmental Commitments.

ITD and FHWA will continue to work with EPA, USFWS, IDFG and the USACE during the design process to identify engineering solutions to minimize wetland impacts due to the selected alternative. Should an individual Section 404 permit be required, a 404(b)(1) analysis will be completed during the Section 404 permitting process. While a 404(b)(1) analysis will not be completed prior to the FEIS, additional information regarding the avoidance, minimization and compensatory mitigation is summarized in the FEIS Section 4.6, under Executive Order 11990 and Chapter 9, Environmental Commitments.

Regarding the inconsistency in E-2 wetland impacts, the tables that were referenced were both correct and added up to 3.61 acres of wetland impact by the E-2 Alternative; however, Table 2 continued on the next page (page 156) and your calculations may not have considered the entire table.

Compensatory Mitigation Plan

Compensatory mitigation for the Action Alternatives will be met by using credits from the Cow Creek Mitigation Area, which has already been successfully implemented. The USACE has already approved the site and it meets their mitigation requirements under Section 404; therefore a detailed compensatory mitigation plan is not necessary. However, should an action alternative be selected and during design refinements it is determined that the wetland impacts would exceed what is stated in the FEIS, then additional mitigation may be pursued by purchasing mitigation bank credits. Wetland mitigation is summarized in the FEIS Section 4.6 under Executive Order 11990 and Chapter 9, Environmental Commitments.

Effects to Palouse Prairie Habitat, Rare and Threatened Plant Species

As stated in the DEIS, the E-2 Alternative is closer to Paradise Ridge and more Palouse remnants compared to the other alternatives but it would not "directly" affect Paradise Ridge, Palouse Prairie Habitat, rare and threatened plant species. The referenced statement on page 45 has been clarified to refer to direct effects. The Noxious and Invasive Weeds technical report by Lass and Prather does indicate that the alternatives would have indirect effects due to weed dispersal which was disclosed in the DEIS Section 6.1 under Indirect Effects. Additional information from the Vegetation Technical Report has been incorporated into the body of the FEIS in sections 3.8, 4.8 and Section 6.1. Additional information regarding the cumulative effects to Palouse Prairie and vegetation has been added to Section 6.2, Cumulative Effects.

In recognition of the potential indirect effects due to weed dispersal and establishment, ITD and FHWA are committed to implementing ITD's Vegetation Management Plan and consulting with USFWS regarding specific weed control measures to minimize impact to Palouse prairie and restoration sites. This may involve providing funding for long term management, maintenance and monitoring which will be determined during the right-of-way process. See the FEIS Chapter 9, Environmental Commitments.

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Wildlife and Habitat

Ecological Connectivity

All the alternatives would accommodate wildlife crossing at county road under-crossings, including the E-2 Alternative. A general description of the wildlife crossing structures and other measures to accommodate wildlife movements is included in the FEIS Chapter 9, Environmental Commitments. Specific detail regarding the type, size and locations of each wildlife structure (bridge and culverts) is not available at this level of design. That detail will be provided during preliminary and final design when specific topographic and geotechnical information is available. If the E-2 Alternative is selected, impacted water features that would be replaced will be relocated on the east side of the roadway to reduce the movement of wildlife across the roadway.

Safety Effects

The crash predictions in the FEIS are based on calculations from the First Edition of the American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual (HSM). The HSM provides the most current and accepted knowledge and practices relating to safety management according to AASHTO and Transportation Research Board Task Forces. FHWA and all 50 State Departments of Transportation have reviewed and accepted the HSMs methods for crash predictions. A better method of crash prediction does not exist.

The Safety Analysis was revised after the DEIS public comment period to address comments and to predict crashes for the entire 19-year design period. In order to make the safety predictions reported in the Safety Analysis and the FEIS for the 19-year design period, nearly 2000 pages of calculations were made on Microsoft Excel Spreadsheets shown in the Revised Safety Analysis (ITD, 2013), Appendix E. The spreadsheets were developed by Karen Dixon, PhD, of Oregon State University, one of the authors of the HSM. Pages 9 through 11 of the Safety Analysis (ITD, 2013) have more detail regarding the methods of calculations used by the HSM.

Facts as well as assumptions were used to predict crash data for Thorncreek Road to Moscow. The following facts are used in the Highway Safety Manual equations and support the prediction that E2 is safer than C3:

- The overall length of E-2 is less than C-3,
- The length of the suburban section in E-2 is shorter than the length of the suburban section of C-3. More accidents are predicted per mile in the suburban section than the rural section due to increased turning traffic, more access points, narrower separation between the northbound and southbound directions, and greater traffic volume,
- E-2 has fewer residential and commercial approaches than C-3,
- C-3 has five public road approaches and E-2 has two public road approaches.

The traffic predictions, their growth rates, Crash Modification Factors, and Calibration Factors are considered assumptions.

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Traffic predictions are included in the Revised Safety Analysis (ITD 2013) Appendix C and E. The Crash Modification Factors as well as the Calibration Factor are included in Revised Safety Analysis (ITD 2013) Appendix E.

The Crash Modification Factors are widely accepted and published in the Highway Safety Manual and the Calibration Factor used is 1.0 for all alignments. All three proposed action alternatives use exactly the same Crash Modification Factors for each highway type. If the Crash Modification Factors are changed, the crash predictions on all three alignments will increase or decrease by about the same amount. Based on these findings, the E-2 Alternative is safer than the C-3 Alternative using prediction methods outlined in the AASHTO Highway Safety Manual.

Wild animal crash potential may be greater on E-2 based on findings in wildlife technical reports that there is more moderate quality ungulate habitat in the Eastern Corridor and due to the presence of a Low Priority Wildlife Linkage Areas for 1.98 miles of the E-2 Alternative's alignment; (Geodata 2008); however, sight distance for the E-2 Alternative would be greater than the C-3 and W-4 (and Modified W-4) alternatives due to its straighter roadway geometry. The greater sight distance on E-2 may offset the wild animal crash potential. The frequency of wild animal crashes is difficult to predict; however, the severity of wild animal crashes is observed to be very low compared to other crash types. Even if more wild animal crashes were predicted on the E-2 Alternative, they would not offset the safety benefits of the other alternatives due to their low severity. The safety benefit can be quantified using FHWA's calculated economic cost of crashes for different crash types.

Roadside clearing is predicted to greatly reduce wild animal crash potential on all action alternatives, because brush and vegetation where wild animals can hide would be removed near the highway. It would also improve driver reaction time. The roadside clearing technique has been found to reduce wild animal crashes from 50 – 90 percent.

This has been demonstrated through similar improvements from in other sections of US-95 and on US-20 between MP 369 and MP 375 where similar improvements reduced the wild animal crashes by 90 percent (ITD 2013). More detailed information regarding wild animal crashes is in the Revised Safety Analysis (ITD 2013).

The Revised Safety Analysis (ITD 2013) considers the safety of the sections of US-95 that would be transferred to the North Latah Highway District. Based on the revised analysis, the E-2 Alternative is predicted to have 46 fewer total crashes and 9 fewer fatal and injury related crashes in the 19 year design period than the C-3 Alternative. It is predicted to have 32 fewer total crashes and 16 fewer fatal and injury related crashes in the 19 year design period than the W-4 Alternative and would have 31 fewer total crashes and 15.5 fewer fatal and injury crashes than the Modified W-4 Alternative.

The difference in the human impacts is believed by ITD and FHWA to be a substantial gain, which is not offset by the other environmental impacts, with mitigation.

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Regarding weather related safety, while weather, including precipitation, is an important contributing factor to driver safety, the highway alignment characteristics govern the spatial distribution of weather-related vehicle accident potential. The concentrations of weather-related accidents are attributable to tight radii curves on steep slopes, and are independent of the relative elevation, snow accumulation, precipitation, or fog within the highway section. The improved typical sections for each of the alternatives would mitigate in weather related safety but would be influenced by factors such as slope orientation, steepness of grade, curvature, and the location of decent. All action alternatives would improve the highway to meet AASHTO standards and would therefore be safe. See the FEIS Section 3.10 and 4.10 and the Revised Weather Analysis (Qualls 2013) for additional information.

Land Use/Induced Development Effects

All of the action alternatives would result in induced growth south of the City of Moscow. This is an area that is already experiencing development. All of the action alternatives would be limited access facilities that would restrict any new accesses and reduce the induced growth and potential indirect and cumulative effects due to residential or commercial growth. The E-2 Alternative is anticipated to have the fewest accesses of any of the action alternatives.

Effects on Farmland and Conservation Reserve Program Lands

The CRP land being affected functions for erosion control and provides moderate wildlife habitat for grassland birds and ungulates. While there may be impacts to CRP lands, these impacts will not result in a long-term degradation of ecological functions. The CRP contracts have or will soon expire and the land would be replanted, most probably, in wheat. Additional information regarding the ecosystem services of farmland including CRP land is included in the FEIS Sections 3.8 and 4.8. CRP land is also discussed in the FEIS Section 3.3 and 4.3.

Environmental Justice-Low Income/Minority Housing

As disclosed in the DEIS, the E-2 Alternative will impact the Benson Mobile Home Park, which is not considered an environmental justice community (low-income or minority populations). It does have some minority residents and provides a source of affordable housing but there are no distinguishable minority or low income populations. Avoidance by the E-2 Alternative was not possible because the homes are oriented all along Eid Road perpendicular to the alignment and it would affect some homes regardless of which way the alignment was shifted. There are no gaps between the houses that would be sufficient to accommodate the width of the alignment without impacting homes. The homes would be relocated according to the Uniform Relocation Act. The E-2 Alternative would disproportionately impact homes in the Benson Mobile Home Park but would not result in a disproportionate impact to low-income or minority populations because this is not considered minority or low income populations. The E-2 Alternative would provide the greatest safety benefit compared to the other alternatives and best meets the project purpose and need. See FEIS Section 4.1.

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Groundwater

A Hydrogeologic Analysis Report has been prepared for the project (RHS 2014). Additional information from this report regarding the direct effects of the alternatives to surface and subsurface waters have been added to the FEIS Sections 3.6, 3.7, 4.6, and 4.7. Additional information regarding indirect and cumulative effects to surface and groundwater has been added to the FEIS Chapter 6, Indirect and Cumulative Effects.

Visual, Noise, and Other Community Effects

The project is currently being designed at a conceptual level of analysis. Should an action alternative be selected, ITD and FHWA will utilize specific geotechnical information and topographic survey data to more specifically design cuts and fills and look for opportunities to minimize the visual impacts of the project. ITD will also meet with landowners during the design process to find opportunities to minimize impacts to properties.

Mitigation measures to minimize impacts are proposed in the FEIS Chapter 9, Environmental Commitments.

Noise

Additional information on noise impacts on wildlife was added to FEIS Section 6.1.

In addition to the above considerations, ITD has considered the land use consistency of the C-3 Alternative and the natural and cultural heritage of Paradise Ridge. This can be exemplified throughout the DEIS and specifically in Chapter 9, Environmental Commitments.

Project Construction

Waste, material, staging and stockpile areas will be identified by the contractor and approved by ITD prior before construction activities begin. Sensitive areas that should be avoided will be identified in consultation with agencies and will be indicated on plan sheets to be retained and protected. Material sources will be commercial sites and therefore will be in compliance with applicable laws and regulations. It is anticipated that the staging, and stockpile sites would be within the existing road footprint. See Chapter 9, Environmental Commitments.

Monitoring and Adaptive Management

All monitoring and adaptive management commitments have been added to the FEIS Chapter 9.

Additional EIS Information needs and Corrections

Information regarding the indirect effects to Palouse prairie remnants, vegetation, and restoration sites has been expanded on in the FEIS Executive Summary as well as in Section 6.1. The reference to the IDFG MOU has been revised. Since the publication of the DEIS ITD and IDFG have come to an agreement on mitigation measures and decided that an MOU was unnecessary. These mitigation measures and additional environmental commitments have been added to the FEIS Chapter 9, Environmental Commitments.

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ITD would like to thank you for your comments and participation in the development of the FEIS.
Sincerely,



KENNETH G. HELM
Project Manager

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